

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"6,798692".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 14:34
L2	2	"6,798691".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 15:42
L3	391	(magnetic near2 element) and conductor and (hard near2 axis) and (easy near2 axis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 15:45
L4	171	365/171,158,173,55,66.ccls. and (magnetic near2 element) and conductor and (hard near2 axis) and (easy near2 axis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 15:51
L5	94	365/171,158,173,55,66.ccls. and (magnetic near2 element) and conductor and (hard near2 axis) and (easy near2 axis) and shape	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 15:52
L6	9	365/171,158,173,55,66.ccls. and magneto-resistive and (magnetic near2 element) and conductor and (hard near2 axis) and (easy near2 axis) and shape	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 15:53
L7	18	365/171,158,173,55,66.ccls. and magneto-resistive and (magnetic near2 element) and conductor and (hard near2 axis) and (easy near2 axis) and layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 15:53
L8	19	365/171,158,173,55,66.ccls. and magneto-resistive and (magnetic near2 element) and conductor and (hard near2 axis) and (easy near2 axis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 15:54

## EAST Search History

L9	15	365/171,158,173,55,66.ccls. and MRAM and magneto-resistive and (magnetic near2 layer) and conductor and (hard near2 axis) and (easy near2 axis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 15:55
L10	5	("6351409"   "6404674"   "6504221"   "6538917"   "6593608").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/17 15:56
L11	6	("5841692"   "6097579"   "6127045"   "6259586"   "6351409"   "6396735").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/17 15:57
S1	22	(magnetic adj2 layer) same S-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/17 14:33
S2	1	(magnetic adj2 layer) same S-shape\$1 same (magnetic adj2 field) same (hard adj2 axis) same (magnetic adj2 layer) same higher same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 11:21
S3	1	(magnetic adj2 layer) same S-shape\$1 same (magnetic adj2 field) same (hard adj2 axis) same (magnetic adj2 layer) same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 11:21
S4	1	(magnetic adj2 layer) same S-shape\$1 same (magnetic adj2 field) same (hard adj2 axis) same (magnetic adj2 layer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 11:21
S5	1	(magnetic adj2 layer) and S-shape\$1 same (magnetic adj2 field) same (hard adj2 axis) same (magnetic adj2 layer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 11:22
S6	1	(magnetic adj2 layer) and S-shape\$1 same (magnetic adj2 field) same (hard adj2 axis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 11:22

## EAST Search History

S7	4	(magnetic adj2 layer) and S-shape\$1 and (magnetic adj2 field) and (hard adj2 axis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 13:50
S8	1	S-shape\$1 with (magnetic adj2 layer) with higher	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 13:51
S9	2	S-shape\$1 same (magnetic adj2 layer) same higher	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 13:55
S10	250	S-shape\$1 with higher	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:49
S11	1	S10 and c-shape\$1 with lower	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 13:56
S12	5	S10 and c-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/02 13:56
S13	1	(magnetic adj2 layer) same S-shape\$1 same C-shape\$1 same (threshold near2 value)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:08
S14	1	(magnetic adj2 layer) same S-shape\$1 same C-shape\$1 and (threshold near2 value)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:08

## EAST Search History

S15	1	(magnetic adj2 layer) and S-shape\$1 and C-shape\$1 and (threshold near2 value)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:08
S16	3	S-shape\$1 with higher with (threshold near2 value)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:11
S17	2	"6,798691".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:13
S18	1	(magnetic adj2 layer) same S-shape\$1 same (hard near2 axis) same higher same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:15
S19	1	(magnetic near2 layer) same S-shape\$1 same (hard near2 axis) same higher same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:15
S20	1	(magnetic near2 layer) same S-shape\$1 same higher same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:16
S21	23	S-shape\$1 same higher same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:16
S22	2	magnetic same S-shape\$1 same higher same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/05 10:16

## EAST Search History

S23	1	magnetic and S-shape\$1 with higher with threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/11 14:23
S24	5	magnetic and S-shape\$1 same higher same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/11 14:24
S25	5	("3271204"   "4587486"   "4618823"   "4678994").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/11 14:24
S26	93620	magnetic near2 layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/11 14:24
S27	121	S26 and S-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/11 14:25
S28	9	S27 and c-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:49
S29	1	S28 and threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/11 14:25
S30	7	("4514827"   "4625297"   "5459701"   "5757695"   "6005800"   "6104633"   "6178112").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/11 14:48
S31	7	("5214840"   "5756366"   "6147922"   "6175525"   "6178111"   "6455177"   "6493258").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/11 14:52

## EAST Search History

S32	2013	S-shape\$1 and c-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:35
S33	114	S32 and threshold	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:50
S34	1	S33 and (hard adj2 axis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/11 14:57
S35	5	365/171,173,158,55,66.ccls. and S-shape\$1 and c-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:51
S36	7	("4514827"   "4625297"   "5459701"   "5757695"   "6005800"   "6104633"   "6178112").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/12 09:46
S37	1	365/171,173,158,55,66.ccls. and S-shape\$1 with higher	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:49
S38	93659	magnetic near2 layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:50
S39	121	S38 and S-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:50

## EAST Search History

S40	5	S39 and c-shape\$1 and 365/171, 173,158,55,66.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:50
S41	2015	S-shape\$1 and c-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:50
S42	1	S41 and threshold and 365/171, 173,158,55,66.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:51
S43	1	S41 and threshold and "365"/\$. ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:51
S44	9	"365"/\$.ccls. and S-shape\$1 and c-shape\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 10:05
S45	7	("5214840"   "5756366"   "6147922"   "6175525"   "6178111"   "6455177"   "6493258").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/12 09:53
S48	3	"6,605836".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 09:55
S49	5	("5652445"   "5757695"   "5953248"   "5978182"   "6104633").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/12 09:55
S50	212	(Shinroku with Maejima) (Shuichi with Ueno) (Takashi with Yakenaga)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 10:09

## EAST Search History

S51	1	S50 and (C-shape\$1 or C-state) and (S-shape\$1 or S-state)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 10:08
S52	1	S50 and (C-shape\$1 or C-state)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 10:08
S53	2	S50 and (magnetic near2 layer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/12 10:08
S54	1	(record\$3 near2 element) and (first near2 conductor) and ((line or strap) with opposite with (hard near2 axis))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 14:41
S55	4	(record\$3 near2 element) and (first near2 conductor) and ((line or strap) same opposite same (hard near2 axis))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:15
S56	7	("5986858"   "6252749"   "6325900"   "6327107"   "6496338"   "6570744"   "6667860").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/28 14:48
S57	9	(record\$3 near2 element) and (first near2 conductor) and ((line or strap) same (hard near2 axis))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:18
S58	65	(side with magnetic with recording) same (side with conductor) same (align\$3 or linear or parallel)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:30



## EAST Search History

S59	50600	(magnetic with recording with device)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:30
S60	4612	S59 and (magnetic with recording with element)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:31
S61	76	S60 and (first near2 conductor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:31
S62	1	S61 and (line with opposite with (hard near2 axis))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:32
S63	65	S61 and (align\$3 or parallel or linear)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:33
S64	62	S63 and (line or strap)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/28 15:33
S65	2	"6,693825".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/15 17:01